

Welcome to our Ultra HD Screen Visualizing Analysis System. I'm Stephen. Today I will show you its hardware architecture and some software we customized for this system.

Basically, this system consists of the 3 times 11 screens. In order to light up all the pixels of those screens, we deploy lots of clusters in the next room. Those clusters are divided into two groups, group A and group B. Each group has 11 graphics workstations and each station is responsible for outputting signals to one column of monitors. Group A directly outputs its signals to the 33 screens with HDMI cables, while B's signals are outputted to Image Processing Center first, then the IPC, Image Processing Center, multiplex some of them to the monitors. During the IPC signals multiplexing, the window size could be enlarged or reduced.

Someone might ask why we need to introduce two groups here, since it looks like the group A is good enough to light up all the screen wall. The scenario is for some well-distributed software we do only need the group A to run the program. However, there might be some situations where it's tough to develop the distributed software or it's just not worth doing that. Think about we are rendering a button or a slider in a web system, I'd rather say for now it's kind of complex to divided some 2D components rendering tasks into different hosts. In addition, the architecture picture we're seeing now is rendering by the Adobe software, which is running on single host with Image Processing Center enlarging its window size.

Apart from those machines we have talked about, we also introduced some interactive devices, such as Kinect and Leap motions to develop some applications. What's more, the laser launchers and cameras are utilized to enable the screen touching.

So, do you have any questions about the hardware architecture we just revealed?

Well, now I'm going to introduce our Global Scale Meteorological Data Visualization System.